DOCUMENT RESUME

ED 045 735 TM 000 327

AUTHOR Stern, Carolyn; And Others
TITLE Teachers Expectations for Achievement of Children in Head Start (TEACH).
INSTITUTION California Univ., Los Angeles. Head Start Evaluation and Research Center.
SPONS AGENCY Office of Economic Opportunity, Washington, D.C.
NOTE 15p.

EDRS PRICE EDRS Price MF-$0.25 HC-$0.85
DESCRIPTORS Academic Achievement, Affective Objectives, Behavioral Objectives, Cognitive Development, Curiosity, Educational Change, *Educational Objectives, Interpersonal Competence, Preschool Children, *Preschool Programs, Program Evaluation, Psychomotor Skills, *Rating Scales, Self Concept, Student Evaluation, *Teacher Attitudes, Test Construction, *Tests
IDENTIFIERS *Head Start, TEACH

ABSTRACT

The development of an instrument (TEACH) which would relate the variables of teacher goals, classroom activities, and children's achievement is fully described. A search of the literature, attitude inventories, and other teacher measures produced a pool of value statements about educational goals which were placed in traditional categories. Descriptions of behaviors indicative of the achievement of a given goal were devised. The item presentation format required two separate responses to the same set of items. The first response was a rating of the importance of the item and the second was a rating of expected level of performance. An unmodified version of the instrument was first administered to head teachers and assistant teachers of 24 Head Start classes during an orientation session and again approximately 8 months later. Results indicated that developmental or readiness factors (emotional, social, situational) had higher rank orders than academic skill factors and that Expectancy scores were generally higher than Importance ratings. There were no significant differences between pre- and post-test ratings, suggesting that the sampled teachers maintained stable feelings about goals. However, the degree of correspondence between Importance and Expectancy increased during the year. The present instrument is long (7 factors; 100 items) and modification is necessary, while its discriminative ability has yet to be established. Examples of the items and tables of mean scores are included in the appendix. (PR)

ED0 457735

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

TEACHERS EXPECTATIONS FOR ACHIEVEMENT OF CHILDREN IN HEAD START (TEACH)

Carolyn Stern, Harriet Prichard, and Barbara Rosenquist

TM 000 327

[1]The work reported was carried out with the support of the United States Office of Economic Opportunity, at the UCLA Head Start Evaluation and Research Center, Dr. Carolyn Stern, Director, Project No. 4117.

TEACHERS EXPECTATIONS FOR ACHIEVEMENT OF CHILDREN IN HEAD START (TEACH)

Carolyn Stern, Harriet Prichard, and Barbara Rosenquist

Introduction

During the past few years the concept of accountability in federal funding of educational projects has been paired with the emphasis on behaviorally-based criteria for measuring success in teaching. This promising marriage has led to the propagation of numerous pre-post evaluations of innovative school programs. Such designs are viable in the elementary grades, where there is some degree of correspondence both between the operational definition of the program goals and the instruments used to measure level of achievement, and between the goals expressed by the teachers and the types of behaviors measured by the evaluation instruments. Unfortunately, there is little evidence that either of these necessary correspondences exists in the early years of schooling.

In the first place, there is a serious dichotomy between the emphasis on affective-emotional-social behaviors which nursery school teachers and child development specialists conceive as appropriate for the four- to six-year-old child, and the current popular focus on remediating cognitive deficits and instilling pre-academic skills. There is also a wide discrepancy between the professed goals of the classroom practitioner and the activities which are instituted presumably to achieve these goals. Finally, there is a notorious lack of instruments for assessing the achievement of goals, even when they are expressed in measurable terms. It is thus not too surprising that several highly publicized evaluations of preschool programs reveal either ephemeral or non-significant gains in concrete

academic skills while the teacher places her values on achievements in the affective domain, which remains comfortably uncharted. This is somewhat analogous to using gain in height to establish the effectiveness of an experimental nutrition program: While there is undoubtedly a physiological connection between food and growth, a valid test requires far more direct and specific criteria.

Instrument Development

The need for an instrument which would be able to relate teacher goals, classroom activities, and achievement in children became apparent within the context of the UCLA Head Start Evaluation Center's Feedback Study. It was the hypothesis of this investigation that there would be a relationship between these three variables such that providing evaluation information to teachers would produce changes in classroom procedures as well as in value systems. To test this hypothesis, it was necessary to develop a comprehensive instrument which could represent the wide variety of goals valued by educators from extremely divergent pedagogical persuasions.

The first step in this instrument development was to amass a pool of value statements. To this end, an intensive search of the literature was carried out and hundreds of items culled from check lists, attitude inventories, and other teacher measures. In addition, teachers, supervisors, and early childhood specialists were asked to provide descriptions of valid goals for the young child. All these were typed on individual cards and reviewed at a meeting of teachers and specialists on the staff of the UCLA Head Start Evaluation Center. The items were tentatively placed in traditional categories such as motor skills, social and emotional

development, self-care, etc., and redundant and overlapping statements were eliminated.

The next step was to devise descriptions of behaviors which would be accepted as evidence of the achievement of the stated goal. In this process many goal statements expressed as "consideration for others," "positive self-concept," and "intellectual curiosity" were translated into several items representing specific behaviors for each of these categories, for example, "waits his turn in the use of playground equipment," for the first, "smiles when looking at himself in the mirror" and "identifies positively with his own race," for the second, and "asks questions about objects in the environment" and "explores different solutions to a problem," for the third. After informal discussion with colleagues and others in the field of early education, the original set of behavioral statements was winnowed to a list of 100 items.

The third step in the instrument development was devising the format for the item presentation. It was felt that a straightforward rating scale type of inventory would not get at the question of correspondence between the value placed on a particular behavior and the expectation of achieving that behavior within the constraints of the preschool classroom. Fortunately, at this point Dr. Edward Suchman, the consultant for the major evaluation study, was visiting the UCLA Head Start Center. He suggested using a model he had applied in an unpublished study of teacher attitudes toward the poverty group and their exposure to such groups. This approach served as the inspiration for the development of a format which requires two separate responses to the same set of items: in the first time through the list, the respondent is asked to indicate the degree

of importance attributed to a particular item; the second time through the rating is for expected level of performance.

Table 1 includes the instructions given to respondents and a sample of the item format. This form of the instrument was filled out by a heterogeneous group of respondents, including the national Evaluation Coordinator, and the data subjected to a principle factor solution, using BMD Program X72, at the UCLA Campus Computing Network. Orthogonal rotation using the varimax method developed the following seven factors: 1) Curiosity (15 items); 2) Independence (15 items); 3) Social Awareness (8 items); 4) Sensory and Cognitive Skills (29 items); 5) Motor Skills (6 items); 6) Self-Awareness (5 items); and 7) School-Appropriate Behavior (22 items).

It was expected that as a result of this pilot testing of the TEACH and the subsequent factor analysis it would be possible to substantially reduce the number of items. However, the need to use the instrument in the pretesting phase of the evaluation study and the delay in obtaining the results of the factor analysis left insufficient time to prepare a modified form. Thus the original instrument, although admittedly overlong, was used in the UCLA Feedback Intervention.

Application of the Instrument

The UCLA Feedback Intervention involved 24 Head Start classes in a primarily urban setting. Both the Head Teacher and the Assistant Teacher were asked to fill out the TEACH as a pretest measure during the first orientation meeting. At this time they were asked to rate the items in terms of (a) degree of importance or relevance for Head Start children; and (b) level of expectation of achievement for that particular objective.

The same measure was administered at the final meeting which took place approximately eight months later.

It was hypothesized that, compared to the control group, teachers given feedback would show a higher degree of correspondence at the end of the year between their ratings of the importance of certain behavioral goals for Head Start children and their estimates of achievement of these goals. Also, there would be a tendency to place greater value on those goals they felt they had achieved compared to goals with which they had had little success.

Results

Table 2 presents the pretest mean scores for the total group, with each mean having a range from 0 (low) to 9 (high). Using the seven factor structure obtained in the preliminary analysis, the item means were summed to derive a grand mean for each factor. These means for the total sample and for each of the treatment groups are presented in Table 3.

For the total group of teachers, the means on the Importance Scale were highest for Independence, Curiosity, Social Awareness, and Self-Awareness, in that order. They were decreasingly lower for Motor Skills, Sensory and Cognitive Skills, and School Appropriate Behavior. These results indicate considerable face validity in terms of the fact that Head Start teachers apparently view the development of emotional, social, and situational maturity as more important than academic skills <u>per se</u>.

Interestingly enough, the Expectation scores are generally higher than the Importance ratings. Several speculations may be advanced for these findings. The teachers may stress the behaviors for which they hold the highest importance, thus a type of self-fulfilling prophecy could

be operative. If this is true, there should be lower Expectation ratings for those factors which are rated low on the Importance Scale. While the rank order of the Expectation ratings follows the same direction as the Importance ratings, the numerically higher Expectation ratings seem to contradict this assumption. Another possibility is that while the teachers do in fact view readiness for learning as a prime function of Head Start, they feel that this goal can best be achieved by first establishing strengths in such non-cognitive areas as basic trust and self-esteem.

Overall, the rank ordering on the factors for the three treatment groups showed the same trend as for the total group. Developmental or readiness factors have higher rank orders than educational factors, and Expectation ratings are higher than Importance ratings.

After the posttest data were obtained, a series of t-tests was run between the pre- and posttest scores on each item. The results of this analysis are presented in Table 2. There were no statistically-significant changes between the pretest-posttest Importance ratings. In other words, the teachers included in this sample had very stable feelings about their objectives. The speculation that there might be a decrement in the value placed upon an objective when it was not adequately achieved, was not supported. The differences that did obtain were between the expectations for achievement and the ratings of level of achievement obtained. Without exception, these differences were in terms of a decrease in mean scores. Thus it appears that for the total group of teachers, the degree of correspondence between Importance and Expectation increased during the year.

While greater variance was found among the teachers in the experimental treatment, the number of items was so large and the sample size

of teachers so small that it would have been meaningless to look for statistical differences between the pretest-posttest scores by treatment group. An informal comparison was done on the teachers included in the TEACH-TASK analysis (Stern & Rosenquist, 1970). Inspection of the individual scores indicated practically no difference for any of the scale comparisons (importance-expectation, pre; importance-achievement, post) and the differences that did exist did not indicate any consistent trend.

Discussion and Conclusion

While the overall results tend to support the hypothesis of correspondence, nevertheless several problems appear inherent in the TEACH instrument. By far the most important is its excessive length, which many teachers found onerous. This fatigue effect expressed itself in a tendency to respond unthinkingly, thus little differentiation either among items or factors was obtained. Also, the large number of rating levels made it difficult to differentiate among the items; almost all the teachers tended to respond in the high direction. Thus it appears that while the general rationale of the TEACH has merit, as supported by the data analysis, additional work is needed in the direction of reducing the number of items and response categories.

The TEACH was also administered to 34 teachers and 15 parents in a research study which was carried out concurrently with the Evaluation (Stern, Kitano, Gaal, Goetz, & Ruble, 1970). However, the data was analyzed separately for that study, using only 95 items with 10 factors.

An adaptation of the TEACH was made for a new research study concerned with parent involvement. The new instrument (PEACH) has 77 items and only four response categories. The responses on the pretest have

been used as jumping off points for the group meetings which constitute the experimental treatment. Thus, while the discriminative ability of the instrument has yet to be established, it does offer many insights into differences in value systems which are providing the basis for meaningful group discussions in this new study.

Table 1

TEACHERS EXPECTATIONS FOR ACHIEVEMENT OF CHILDREN IN HEAD START (TEACH)

Even among educators and specialists in child development, there is difference of opinion as to appropriate goals and activities for children in Head Start. We have collected a large number of items describing a variety of behaviors and would like you to express your reactions to each of them.

In Scale I, indicate to what extent you think that a particular behavior or activity is important and should be included in Head Start. For instance, if you think that "sits quietly at the table during mealtimes" is not at all important, you would give it a "low" rating of 0; if you think it extremely important you would give it a "high" rating of 9. If you feel that it falls somewhere between these two extremes, you can give it any rating between 0 and 9. Ask yourself as you mark each item: "How important is this goal for the average child in my class?"

Remember, this is not a test with right or wrong answers. There are equally good teachers who hold quite opposite opinions. Also, all your responses will be kept completely confidential, so do not hesitate to express ideas which you may feel are different from those of other teachers and child development specialists.

After you have rated each item on Scale I in terms of importance, we would like you to rate on Scale II the extent to which you feel your children will acquire the described behavior as a result of their Head Start experience. It is quite possible that a skill is very important, but so difficult to teach that you probably won't get very far in one year of Head Start. On the other hand, you may judge an activity to be relatively unimportant, but easy to teach.

NOTE: Fill in Scale I for all items. Then fold paper so that Scale II on back of page matches the same items on the front of the page in the same position as Scale I.

EXAMPLES

Scale I
Degree of Importance

Item	Low 0	1	2	3	4	High 5	6	7	8	9
51. Names numerals from 1 to 10										
52. Sits quietly at the table during mealtime										
53. Takes responsibility for his own mistakes										
54. Volunteers ideas of his own										
55. Recites the entire alphabet by memory										

Table 2

Mean Pre- and Posttest Scores and Differences between Importance and Expectation[1] Ratings by Factors and Items

Factor		Pretest Mean Scores				Test of Difference between pre- and posttest ratings	
		Importance N = 38		Expectation N = 38		Importance N = 28	Expectation N = 28
	Item No.	Mean	S.D.	Mean	S.D.	t - value	t - value
I: Creativity	15	7.55	2.32	8.10	1.20	0.33	- 0.71*
	20	7.53	1.95	7.79	1.53	- 0.39	- 0.07
	22	6.55	1.90	7.11	2.25	0.11	- 0.19*
	23	7.16	1.89	7.49	2.05	- 0.14	- 0.64*
	25	7.63	1.71	7.42	2.53	0.04	- 0.93
	30	6.87	2.24	7.42	2.26	0.11	- 0.53
	54	6.89	2.41	6.71	2.84	0.46	- 0.11
	56	5.42	2.31	5.68	2.48	- 0.11	- 0.26
	59	5.71	2.48	6.55	2.37	0.41	- 0.11
	70	5.68	2.41	6.60	2.44	- 0.39	- 0.93
	72	7.95	1.69	7.87	2.00	0.11	- 0.39
	79	6.84	2.12	7.03	2.41	- 0.26	0.11
	84	5.99	1.95	6.99	1.69	0.0	- 0.50
	98	6.58	2.56	6.97	2.52	0.04	- 0.31
	100	8.16	1.50	8.34	1.07	- 0.36	0.32
II: Independence	2	6.34	2.77	7.39	2.21	- 0.25	- 1.00**
	8	6.89	1.98	8.05	1.43	- 0.11	- 0.36*
	29	8.21	1.51	8.26	1.13	- 0.18	- 0.43
	39	6.99	2.21	6.76	2.77	- 0.25	- 0.50**
	48	6.26	2.62	7.29	2.36	- 0.32	- 1.22*
	53	6.15	2.34	6.16	2.44	- 0.25	- 0.75
	57	6.87	2.16	6.63	2.92	- 0.43	- 0.74
	62	6.63	2.34	7.31	2.41	- 0.43	- 0.46*
	63	6.95	2.48	6.84	2.88	- 0.44	- 0.96
	73	7.18	2.50	7.37	2.42	- 0.41	- 0.74
	88	5.71	2.73	6.42	2.28	- 0.57	- 0.64
	89	7.29	2.11	8.03	1.57	0.36	- 0.18
	94	7.24	2.06	6.95	2.31	- 0.32	- 0.04
	96	6.87	2.35	6.84	2.52	0.11	- 0.31*
	97	7.16	2.02	7.49	1.55	- 0.57	- 0.82

*p < .05
**p < .01

[1] On the Posttest, the Expectation Scale was expressed as estimate of achievement

Table 2 (cont'd.)

Factor		Pretest Mean Scores				Test of Difference between pre- and posttest ratings	
		Importance N = 38		Expectation N = 38		Importance N = 28	Expectation N = 28
	Item No.	Mean	S.D.	Mean	S.D.	t - value	t - value
Social Awareness	9	5.89	2.68	6.74	2.24	0.52	- 0.67
	33	7.52	1.70	7.49	1.95	0.18	0.21
	35	6.71	2.47	6.87	2.56	- 0.04	- 0.14
	38	7.42	1.83	7.29	2.28	0.14	0.14*
	44	7.31	2.09	7.49	2.47	0.14	- 0.43
	58	6.89	2.54	7.03	2.59	- 0.79	- 0.79
	78	6.89	2.04	7.29	2.23	- 0.14	- 0.14
	86	6.63	2.53	7.68	1.53	- 0.03	- 0.04
Sensory and Cognitive Skills	1	4.16	2.89	5.65	2.81	0.32	- 0.32
	3	5.76	3.07	7.61	1.97	0.65	- 0.46
	6	5.39	2.81	6.05	2.72	- 0.46	- 0.27
	7	6.92	2.32	8.05	1.66	0.30	0.04
	19	5.81	2.94	6.37	2.54	- 0.96	- 0.57*
	27	6.18	2.68	7.03	2.63	0.0	- 1.22**
	31	7.50	1.90	7.29	2.39	- 0.39	- 0.79*
	34	7.66	1.73	7.61	2.54	- 0.18	- 0.36
	37	7.39	2.28	7.79	2.08	0.54	- 0.29
	41	6.21	2.26	7.10	2.37	- 0.11	- 0.54**
	43	6.26	2.55	7.03	2.75	- 0.25	- 0.48**
	45	5.03	2.96	6.05	2.47	- 0.79	- 1.64
	46	6.74	2.33	6.84	2.34	- 0.54	- 0.54*
	47	6.18	2.49	6.76	2.65	- 0.07	- 1.14*
	49	4.31	2.62	5.08	2.90	- 1.07	- 1.54
	50	5.45	2.59	5.63	2.54	- 0.54	- 1.14
	51	6.81	2.52	7.21	2.71	- 0.46	- 0.32
	60	6.58	2.84	7.45	2.42	.0.21	- 0.54
	67	6.08	2.42	6.81	2.31	0.18	- 0.36**
	71	5.42	2.80	6.92	2.64	- 0.52	- 1.32
	74	7.24	1.81	7.05	2.31	- 0.32	- 0.32
	76	6.37	2.86	7.10	2.24	0.25	- 0.21*
	81	6.37	2.58	7.16	2.20	- 0.18	- 0.93
	82	5.68	2.63	6.79	2.17	0.39	- 0.18
	87	5.71	2.36	6.39	2.63	0.55	- 0.26
	90	6.29	2.24	6.92	1.92	- 0.57	- 1.00
	91	6.34	2.59	7.37	1.58	- 0.82	- 0.75*
	92	7.26	2.42	7.37	2.88	0.0	- 0.81*
	99	5.42	2.58	6.24	2.40	- 0.36	- 1.07

Table 2 (cont'd.)

Factor	Item No.	Pretest Mean Scores: Importance N = 38 Mean	S.D.	Expectation N = 38 Mean	S.D.	Test of Difference between pre- and posttest ratings: Importance N = 28 t - value	Expectation N = 28 t - value
Motor Skills	4	5.26	2.87	6.92	2.37	0.24	- 0.18**
	26	4.99	2.94	6.26	3.00	0.04	- 1.88
	36	6.79	2.85	7.18	3.05	0.28	0.24
	66	5.79	2.59	6.47	2.82	0.50	0.22
	77	6.08	2.58	6.81	2.37	- 0.22	- 0.36
Self Awareness	12	7.29	2.08	7.37	2.10	0.64	0.54
	13	6.13	2.39	6.31	2.51	0.46	- 0.15
	14	6.66	2.58	7.10	1.98	- 0.15	- 0.11
	61	5.39	2.54	6.05	2.87	0.07	- 0.29**
	83	6.99	2.28	7.39	2.28	0.07	- 0.78
School-appropriate Behaviors	5	6.11	2.88	6.79	2.55	0.25	- 0.32
	10	4.16	3.11	5.50	2.77	0.21	- 0.11
	11	7.24	2.51	8.08	1.71	0.07	- 0.71
	16	6.63	2.47	6.81	2.42	0.18	- 0.25
	17	3.55	3.21	4.87	3.09	- 0.36	- 0.46
	18	5.21	2.92	6.24	2.71	- 0.61	- 0.68
	21	4.45	2.30	6.16	2.27	0.18	0.18*
	24	5.50	2.72	6.55	2.83	0.29	- 1.19
	28	5.79	2.51	6.31	2.69	0.43	- 0.29
	32	3.21	2.46	4.16	2.98	- 1.00	- 1.00
	40	6.18	2.32	6.97	1.99	0.21	- 0.21*
	42	6.16	2.70	7.24	2.37	- 0.25	- 0.67
	52	3.21	2.73	4.29	3.05	0.21	- 0.04
	55	2.87	2.47	3.99	3.08	0.25	0.11**
	64	3.99	2.99	4.89	2.87	- 0.86	- 1.25
	65	4.61	2.87	6.08	2.89	0.21	- 0.19
	68	5.16	2.66	6.26	2.61	- 0.79	- 0.79
	69	3.66	2.70	4.97	3.13	- 0.18	- 0.53
	75	4.31	3.19	5.39	2.95	- 0.39	- 0.32
	80	4.16	2.80	5.16	3.02	0.50	- 0.03
	85	6.26	2.27	7.29	2.46	0.29	- 0.07
	93	5.31	2.83	6.66	2.47	- 0.07	- 0.32

Table 3

Rank Order of Means for 7 Factors on the Teacher Expectations of Achievement of Children in Head Start (TEACH) Scale (by Treatment Groups)

			Experimental N = 15		Control 1 N = 11		Control 2 N = 12		Total N = 38	
	Factor	Scale	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
I.	Curiosity (15 items)	Importance	6.87	2.5	6.42	3	7.63	1	6.84	2
		Expectation	7.06	1.5	8.09	1	7.83	1	7.55	1
II.	Independence (15 items)	Importance	7.05	1	6.93	1	7.15	3	7.03	1
		Expectation	7.13	3	7.81	4	7.72	2	7.51	2
III.	Social Awareness (8 items)	Importance	6.87	2.5	6.66	2	7.52	2	6.94	3
		Expectation	7.06	1.5	7.65	5	7.61	4	7.40	4
IV.	Sensory and Cognitive Skills (29 items)	Importance	6.27	6	5.18	6	6.25	4.5	5.90	6
		Expectation	6.94	4	7.84	3	7.49	5	7.41	3
V.	Motor Skills (6 items)	Importance	6.40	5	5.60	5	6.25	4.5	6.05	5
		Expectation	6.88	5	7.21	6	7.69	3	7.23	5
VI.	Self Awareness (5 items)	Importance	6.66	4	6.33	4	6.24	6	6.52	4
		Expectation	6.53	6	7.94	2	7.24	6	7.18	6
VII.	School-Appropriate Behavior (22 items)	Importance	4.84	7	4.77	7	4.91	7	4.83	7
		Expectation	5.78	7	6.73	7	6.25	7	6.23	7